



Clean Energy Future Committee Meeting Minutes

Approved at the 5-22-2020 meeting

April 24, 2020

8:00 – 9:30 a.m.

Virtual Meeting – Hosted on Zoom

Members present: Jim DiTullio, Ryan Katofsky, Ken Pruitt, Dave Levy, Marc Breslow, Emily Sullivan, Coralie Cooper, Shelly Dein, Dan Amstutz, Adam Chapdelaine.

Members not present: Dan Dunn, Nellie Aikenhead, Pasi Miettinen.

The meeting convened at 8:06 a.m.

Video Meeting Procedures

Mr. Pruitt read a set of prepared remarks explaining the procedures that the Committee would follow to hold a virtual meeting. Governor Baker signed an Executive Order in response to the COVID-19 pandemic allowing virtual meetings, which suspended the usual Open Meeting Law requirement that a quorum of committee members be physically present in order to hold an official committee meeting.

Meeting Minutes

Ms. Cooper made two edits to the Minutes and Mr. Katofsky noted a name change. Mr. Katofsky motioned to approve the Minutes. Mr. Breslow seconded the motion. A roll call vote was held to approve the Minutes from 03/27/2020. The Committee unanimously approved the Minutes.

Agenda Item 1: Volunteers Sought for Zoning and Permitting Working Group

Mr. Pruitt noted that while the Committee is almost done reviewing the list of MAPC-suggested items for inclusion in the Net Zero Plan, MAPC is also proposing a list of zoning and permitting measures that could be beneficial for this effort. Mr. Pruitt noted that to review this list, a working group of two members each from the CEFC and the Arlington Redevelopment Board was being formed. The CEFC-ARB working group is expected to complete its review by May 15 so that the list of revised measures could then go to the full CEFC. Mr. Levy and Ms. Cooper volunteered to participate on the working group from the CEFC.

Agenda Item 2: Clean Energy Supply GHG Mitigation Measures

Mr. Pruitt then turned to a list of Clean Energy Supply GHG mitigation measures suggested by MAPC for potential inclusion in Net Zero plans. The CEFC reviewed six measures.

Action Item 1: recommends that the Town increase the default percentage of carbon-free electricity in the Community Choice Aggregation (CCA) program's default to 100% by 2030. It also calls for an annual campaign to encourage residents to voluntarily opt-up to the 100% level until that goal is reached. This measure is specifically written to be "carbon-free" by 2030 noting that hydro and nuclear are carbon-free but not considered "renewable."

Mr. Katofsky argued that "until that goal is reached" should be removed because the CCA renewable content level does not include nuclear or hydro, and encouraging residents to opt-up to the CCA 100% renewable level would help maintain strong demand for renewable power. Mr. Katofsky also suggested that by 2030, the CCA 50% renewable product could be unnecessary given the renewable generation coming online in New England between now and 2030. Mr. Katofsky also noted that we need to be mindful of the cost implications of increasing the renewable default level, especially during an economic downturn. Mr. Pruitt noted that Arlington could petition the Department of Public Utilities for inclusion of a rate reduction mechanism in Arlington's CCA program that would prevent rate increases for low income customers. He suggested this greenhouse gas reduction measure should include language calling for monitoring of cost impacts on low-income ratepayers.

Mr. Breslow noted he did not want to have nuclear power count toward this 100% carbon-free goal, and noted that this perhaps could make the 100% goal unviable. Mr. Pruitt noted the drawbacks to nuclear power, but noted eliminating nuclear from this measure would likely exacerbate cost concerns.

Mr. Katofsky noted the expectation is most nuclear power plants will retire by 2040, noting that by 2050 the goal will be achieved in the long term. Mr. Amstutz noted he'd like more background on the proposal to get a sense of the debate on nuclear and asked what a Class I REC (Renewable Energy Certificate) is. Mr. Katofsky noted that the Class 1 REC is a statutory obligation for utilities in Massachusetts to procure a certain amount of generation from a specific class of renewable energy resources. It represents the types of renewables the Commonwealth is trying to procure to be considered renewable generation. When the town requires renewable generation to be bought for the CCA, the same standards are required for renewable generation to be counted as part of electricity supply.

Ms. Dein noted that large hydro is not included as Class I and wind and solar outside of New England are not considered Mass Class 1 RECs unless there is a path for that power to be delivered into the New England electricity grid. Mr. Katofsky noted there are two nuclear plants operating in New England. There are no nuclear plants planned for construction in New England. They currently have operating licenses that expire in the 2040s.

Mr. Pruitt noted that nuclear has major benefits in terms of carbon-free baseload power but noted there is a danger of a nuclear accident and there is no existing location for nuclear waste disposal. Ms. Dein noted that the practical ramifications would be if nuclear supplied 25% of the power, the CCA would purchase 75% Class I RECs and

then would stop, because the two categories together would achieve the 100 percent carbon-free goal. Mr. Katofsky clarified that the RPS (Massachusetts Renewable Portfolio Standard) is currently 16% of the electricity supply, and it increases by 2% per year, so by 2030 it would be at 36%. If we did nothing, by 2030 we would be at 47% renewable energy (36% for the RPS requirement, plus the current extra 11% required under Arlington's CCA program). By enacting this proposed Action Item, we would be at almost 75% (the 47% mandated by the RPS + CCA, plus 25% from nuclear).

Mr. Pruitt said that when the plan is written, specific definitions of renewable energy could be written in the plan with more detail. Mr. Katofsky noted that the original intent of this measure was to be fossil fuel free as an energy plan option. Mr. Pruitt said this was the first draft of this measure and asked if there was any objection in moving to the next measure. The Committee supported this measure but would like additional discussion before it is finalized in the Net Zero Plan.

Action Number 2: Investigate the feasibility of developing a low-income community shared solar program. Ms. Cooper noted her support for this measure, and pointed out that this measure more directly supported construction of solar installations than the above CCA measure. Mr. Levy noted that there are many private market entities examining how to bring solar to low income customers, so this may get solved on its own. Ms. Dein noted that Newton offers a low income option in its Community Shared Solar (CSS) program. Ms. Dein also noted the SMART program is offering solutions (or trying to) to target these customers. Mr. Pruitt asked for any objections to including the action item and including the language "with emphasis on low income rate payers." The Committee supported this measure.

Action Item Number 3: Support state legislation and policies that decarbonize the region's electricity supply and promote decarbonization incentives specifically for low- to moderate-income residents. The Committee supported this measure.

Action Item Number 4: Partnering with utilities and others to promote pilot programs to help customers transition away from natural gas by creating district geothermal heating and cooling systems. Mr. Pruitt said that this, at scale, could benefit many buildings, such as buildings on Mass Ave in Arlington. The Committee noted the uncertainty of this effort at such an early stage of its development, but supported promoting pilot projects where feasible practically and affordably. Mr. Pruitt noted Eversource and National Grid are exploring such pilots currently. Ms. Dein noted that a developer in Boston is examining this for a project in Boston. Mr. Katofsky said that he thinks one of the two utilities has money in its rate plan to examine a pilot project but he is unsure of which utility. The Committee supported this measure.

Action Item Number 5: Put pressure on regulators and utilities to greatly accelerate the repair of gas leaks. The Committee supported this measure.

Action Item Number 6: Transitioning the Town's Municipal Energy Supply Contract to be 100% carbon-free by 2030. The Town's current municipal electricity supply contract started in December 2019 and expires in 2023. This measure would have the Town

match the commitment in Action Item 1 to increase the carbon-free content of the CCA program default to be 100% by 2030.

Mr. Katofsky wondered if the Town should simply join the CCA but noted there may be advantages for the Town to procure separately with its own supply contract. The Committee supported this measure with the addition of language calling for the examination of costs vs. benefits of joining the CCA vs. having separate municipal supply contracts, and that the Town will consider costs when deciding whether this measure should call for 100% “carbon-free” vs. 100% “renewable” power, given controversy over nuclear power (the same concern voiced regarding Action Item 1).

Additional Discussion

Ms. Cooper asked if the Town was thinking about the Stimulus Package and if the Town was thinking about “shovel ready projects.” Mr. Amstutz noted there is a group within the Town examining such projects and MAPC is trying to coordinate these projects as well throughout the various towns in the Commonwealth. Mr. Katofsky noted that the Department of Energy Resources issued recent orders in the SMART (Solar Massachusetts Renewable Target) program that could really help make municipal solar projects more viable.

Mr. Katofsky asked about how energy efficiency work could progress during the coronavirus pandemic. He noted that work in schools and other vacant buildings for efficiency upgrades could be a great effort to get people back to work. Mr. Levy supported this concept.

Ms. Cooper motioned to end the meeting. Mr. Levy seconded. A roll call was taken to approve the motion to end the meeting. The Committee voted unanimously to approve the motion.

The Meeting ended at 9:35 am. The next meeting will occur on May 22, 2020.

Submitted by Dave Levy.



Clean Energy Future Committee

Date: Friday April 24, 2020

Time: 8:00 a.m.

Location: Conducted via remote participation

To register for the Zoom Meeting:

<https://us02web.zoom.us/joining/register/tZlqf-irqTMrHNJGifqrGTqpEHMeMCsije-y>

After registering, you will receive a confirmation email containing information about joining the meeting.

Members of the public are asked to send written comment to:

kpruitt@town.arlington.ma.us.

Notice to the Public on meeting privacy

In the interests of preventing abuse of videoconferencing technology (e.g. "Zoom Bombing") all participants, including members of the public, wishing to participate via Zoom must register for each meeting and will notice multi-step authentication protocols. Please allow additional time to join the meeting. Further, members of the public who wish to participate without providing their name may still do so by telephone at 929-436-2866. Meeting ID: 867 8137 8166 Password: 034459.

Documents related to the below agenda items follow as attachments to this document.

Agenda

8:00 – 8:10: Review meeting ground rules

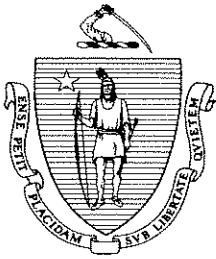
8:10 – 8:15: Review & Approve Minutes from 3/27/2020 meeting

8:15 – 9:30: Review draft Clean Energy Supply measures for Net Zero Plan

Next meeting: May 22, 2020

Attachments:

- 1) Governor Charles Baker's 3/12/2020 Executive Order Suspending Certain Provisions of the Open Meeting Law
- 2) Meeting minutes from 3/27/2020
- 3) Draft Clean Energy Supply Measures



OFFICE OF THE GOVERNOR
COMMONWEALTH OF MASSACHUSETTS
STATE HOUSE • BOSTON, MA 02133
(617) 725-4000

CHARLES D. BAKER
GOVERNOR

KARYN E. POLITO
LIEUTENANT GOVERNOR

**ORDER SUSPENDING CERTAIN PROVISIONS
OF THE OPEN MEETING LAW, G. L. c. 30A, § 20**

WHEREAS, on March 10, 2020, I, Charles D. Baker, Governor of the Commonwealth of Massachusetts, acting pursuant to the powers provided by Chapter 639 of the Acts of 1950 and Section 2A of Chapter 17 of the General Laws, declared that there now exists in the Commonwealth of Massachusetts a state of emergency due to the outbreak of the 2019 novel Coronavirus ("COVID-19"); and

WHEREAS, many important functions of State and Local Government are executed by "public bodies," as that term is defined in G. L. c. 30A, § 18, in meetings that are open to the public, consistent with the requirements of law and sound public policy and in order to ensure active public engagement with, contribution to, and oversight of the functions of government; and

WHEREAS, both the Federal Centers for Disease Control and Prevention ("CDC") and the Massachusetts Department of Public Health ("DPH") have advised residents to take extra measures to put distance between themselves and other people to further reduce the risk of being exposed to COVID-19. Additionally, the CDC and DPH have advised high-risk individuals, including people over the age of 60, anyone with underlying health conditions or a weakened immune system, and pregnant women, to avoid large gatherings.

WHEREAS, sections 7, 8, and 8A of Chapter 639 of the Acts of 1950 authorize the Governor, during the effective period of a declared emergency, to exercise authority over public assemblages as necessary to protect the health and safety of persons; and

WHEREAS, low-cost telephone, social media, and other internet-based technologies are currently available that will permit the convening of a public body through virtual means and allow real-time public access to the activities of the public body; and

WHEREAS section 20 of chapter 30A and implementing regulations issued by the Attorney General currently authorize remote participation by members of a public body, subject to certain limitations;

NOW THEREFORE, I hereby order the following:

(1) A public body, as defined in section 18 of chapter 30A of the General Laws, is hereby relieved from the requirement of section 20 of chapter 30A that it conduct its meetings in a public place that is open and physically accessible to the public, provided that the public body makes provision to ensure public access to the deliberations of the public body for interested members of the public through adequate, alternative means.

Adequate, alternative means of public access shall mean measures that provide transparency and permit timely and effective public access to the deliberations of the public body. Such means may include, without limitation, providing public access through telephone, internet, or satellite enabled audio or video conferencing or any other technology that enables the public to clearly follow the proceedings of the public body while those activities are occurring. Where allowance for active, real-time participation by members of the public is a specific requirement of a general or special law or regulation, or a local ordinance or by-law, pursuant to which the proceeding is conducted, any alternative means of public access must provide for such participation.

A municipal public body that for reasons of economic hardship and despite best efforts is unable to provide alternative means of public access that will enable the public to follow the proceedings of the municipal public body as those activities are occurring in real time may instead post on its municipal website a full and complete transcript, recording, or other comprehensive record of the proceedings as soon as practicable upon conclusion of the proceedings. This paragraph shall not apply to proceedings that are conducted pursuant to a general or special law or regulation, or a local ordinance or by-law, that requires allowance for active participation by members of the public.

A public body must offer its selected alternative means of access to its proceedings without subscription, toll, or similar charge to the public.

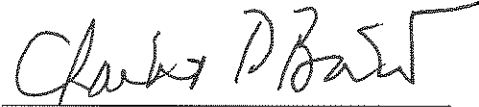
(2) Public bodies are hereby authorized to allow remote participation by all members in any meeting of the public body. The requirement that a quorum of the body and the chair be physically present at a specified meeting location, as provided in G. L. c. 30A, § 20(d) and in 940 CMR 29.10(4)(b), is hereby suspended.

(3) A public body that elects to conduct its proceedings under the relief provided in sections (1) or (2) above shall ensure that any party entitled or required to appear before it shall be able to do so through remote means, as if the party were a member of the public body and participating remotely as provided in section (2).

(4) All other provisions of sections 18 to 25 of chapter 30A and the Attorney General's implementing regulations shall otherwise remain unchanged and fully applicable to the activities of public bodies.

This Order is effective immediately and shall remain in effect until rescinded or until the State of Emergency is terminated, whichever happens first.

Given in Boston at 6:40 PM this 12th day of
March, two thousand and twenty.

A handwritten signature in dark ink, appearing to read "Charles D. Baker", written over a horizontal line.

CHARLES D. BAKER
GOVERNOR
Commonwealth of Massachusetts



Clean Energy Future Committee Meeting Minutes

Draft – for approval at the 4-24-2020 meeting

March 27, 2020

8:00 – 9:30 a.m.

Virtual Meeting – Hosted on Zoom

Members present: Jim DiTullio, Ryan Katofsky, Ken Pruitt, Dave Levy, Marc Breslow, Emily Sullivan, Coralie Cooper, Shelly Dein, Pasi Miettinen, Nellie Aikenhead, Dan Amstutz, Adam Chapdelaine

Members not present: Dan Dunn

The meeting convened at 8:07 a.m.

Video Meeting Procedures

Mr. Pruitt read a set of prepared remarks introducing the procedures that the Committee would follow in order to hold a virtual meeting. Governor Baker recently signed an Executive Order in response to the COVID-19 pandemic allowing virtual meetings, which suspended the usual Open Meeting Law requirement that a quorum of committee members be physically present in order to hold an official committee meeting.

Meeting Minutes

Ms. Cooper moved to have the Minutes from the 2/28/2020 meeting approved. Mr. Chapdelaine seconded the motion. Mr. Pruitt called the Committee's attention to several small edits offered by Dan Amstutz. Afterward, a roll call vote was held to approve the Minutes from 2/28/2020 as amended. The Committee unanimously approved the Minutes with Mr. DiTullio abstaining.

Agenda Item 1: Status of Fossil Fuel Warrant Article #13

Patrick Hanlon, a leader in the Clean Heat for Arlington campaign, spoke to the Committee about the status of Town Meeting Warrant Article #13, the fossil fuel bylaw. The Warrant Article would create a new bylaw prohibiting new fossil fuel piping in new homes and substantial renovations. Mr. Hanlon began by summarizing the public hearing on the Warrant Article held by the Select Board on March 9, 2020. At that meeting, after hearing presentations by several advocates, the Select Board approved the Warrant Article text as submitted, with some small changes. The appeals process, for example, in part 6 of the text, was adjusted to have the Town Manager handle any appeals. Other minor edits were also made. However, section 5(b), which sets out procedures for waivers to the bylaw, included placeholder language about criteria for granting waivers that has not been finalized. The Select Board did not provide guidance

on revising that language. Mr. Hanlon flagged this is an issue that still needs to be addressed. Another issue that was discussed but not resolved at the meeting was the definition of Major Renovation. As drafted, the definition is met when there is alteration of 50% of the gross floor area of a commercial building, or 75% of the gross floor area of a residential building. There was discussion on whether the residential definition for Major Renovation should be met with a smaller percentage – such as 50% instead of 75%, which many argue still constitutes a “gut renovation.” The Select Board was open to further discussion on this point, and agreed that the proponents should keep working on the language.

A working group of Clean Energy Future Committee members as well as bylaw proponents from Mothers Out Front and Sustainable Arlington met after the Select Board meeting to discuss this and other outstanding questions. After further review and discussion, the working group decided that most major renovations that exceed 50% of gross residential floor area are so extensive that they also exceed 75% of gross floor area. For this reason, a decision was made to maintain the residential definition of Major Renovation at alteration of 75% of gross floor area.

Mr. Hanlon noted that this year’s Annual Town Meeting may be postponed due to the COVID-19 pandemic, and even if one is held, it may not include non-budgetary items. For this reason, Warrant Article 13 may not be considered until a potential fall special Town Meeting. Given that delay, there is a possibility that the Attorney General will rule on the legality of the very similar Brookline fossil fuel bylaw before Arlington’s bylaw is considered at Town Meeting. This possible ruling may provide valuable information to Arlington in terms of which parts of the Brookline bylaw she considers allowable versus not allowable. This information could help Arlington modify its proposed bylaw before it is voted upon to address any constitutional or legal vulnerabilities.

Mr. Hanlon concluded his remarks and Mr. Pruitt, in compliance with the opening statement, invited participants to ask questions.

Ms. Cooper asked Mr. Hanlon if Arlington would have the same building code pre-emption issue as Brookline does. Mr. Hanlon noted that upon the Effective Date of the proposed bylaw, the Building Inspector would not be able to issue a building permit for a project that was in violation of the bylaw. That could indeed raise building code pre-emption concerns. Mr. Hanlon went on to say that pre-emption concerns might be avoided if the bylaw imposed a permit delay, rather than outright denial. There is precedent for this kind of bylaw in the form of the demolition delay bylaw. Mr. Hanlon thought a delay in permit issuance could help convince builders to apply for a permit without fossil fuel infrastructure.

Mr. Pruitt then opened the conversation to members of the public. No questions were asked.

Agenda Item 2: Review of Mobility Related Greenhouse Gas Mitigation Measures

Mr. Pruitt introduced this discussion by noting that Arlington is partnering with the City of Melrose, Town of Natick and the Metropolitan Area Planning Council (MAPC) to help produce Net Zero Plans for all three communities. MAPC has created lists of

greenhouse gas (GHG) mitigation measures for review and adoption by the three communities for their Net Zero Plans. The mobility related measures under discussion today were recommended by MAPC. Mr. Pruitt noted that the majority of the mobility measures from MAPC were already discussed by this committee in a previous meeting. The goal at this meeting was to complete review of these measures.

Regarding a measure to electrify the Town vehicle fleet, Ms. Cooper asked (with Mr. DiTullio expanding) if all municipal vehicles purchased need to be electric starting in 2030, or if purchases need to start earlier such that all municipal vehicles are electric by 2030. Mr. Pruitt said that this committee would need to make that decision. He also noted that the language of this measure clarified that only makes and models that were viable for the vehicle need would be required, and that there may be some kinds of vehicles, especially large trucks, for which a viable all-electric version will still not exist in 2030. Ms. Cooper stated that the Committee should revisit the question of when the purchase of all-electric vehicles should occur.

Mr. Katofsky also questioned the word “viable” to be included in the language because there were many different interpretations of this word.

Regarding Item 13 in MAPC's proposed list of mobility measures, Develop a procurement and financing plan for electric school bus fleets: Mr. Pruitt noted recent progress has occurred in other school districts on this topic. Mr. Katofsky questioned whether school buses are part of the municipal fleet, and Mr. Pruitt stated they are. Mr. Amstutz stated that he thought this measure should be included in a similar measure targeting the full municipal vehicle fleet – why single out school buses for their own recommendation?

Mr. Pruitt noted the list of measures “A1” through “A8” are mostly additions to the MAPC list suggested by members of the CEFC. Items A1-A3 were brought over from an older MAPC list of recommended mobility measures. Items A4-A8 were recommended by CEFC members.

Regarding Item A1, Adopt EV readiness or installation requirements in new buildings, the Committee endorsed it.

Regarding item A2, Encourage private businesses to offer incentives to employees for transit, biking and walking, Mr. Katofsky recommended adding the word “public” in front of the word “Transit.”

Mr. Katofsky asked whether item A3, Upgrade parking policy to have EV charging station parking areas as a required parking space, should be for public or private parking or both. Mr. Pruitt suggested it should be for both. Mr. DiTullio supported the concept in principle, but noted there will be details to be work out regarding how long a space should can be occupied. Mr. Miettinen said there is no evidence that public infrastructure for charging encourages greater adoption of EV vehicles. Given this, there is a question of whether this will help greater transition to an EV landscape. Ms. Cooper wondered if further study should be adopted. Mr. Katofsky asked what percentage of the public would need EV charging stations in parking lots. Mr. Pruitt suggested it may

be as much as 30 percent of the Town's population given how many people rent versus own their homes. Mr. Amstutz noted there is data available for such a discussion. Ms. Dein asked if this discussion was about parking for single family homes or for apartment complexes and other parking lots. Mr. Pruitt said his sense of the measure was that it was not aimed at single family homes. Mr. Katofsky noted that smaller apartment units should be included in this measure.

Regarding Item A4, Build protected bicycle infrastructure, Mr. Amstutz provided background on this item and all remaining A items, since he had recommended them. Mr. Amstutz wanted to expand the concept of mobility to include more than driving cars and include other forms of transportation. This larger view would allow for further measures to help minimize high carbon modes of transportation.

Mr. Pruitt asked if there was any objection to discussing items A4-A8 as a group and asked for comments on those items. Mr. Levy noted that while these plans are terrific, we need action by Town government to actually implement them. Mr. Katofsky noted that on item A6, Implement a neighborhood traffic management program to slow or divert traffic to make walking and bicycling more comfortable and easy, that if traffic were moved from some parts of town to other parts of town, it should be done in a thoughtful way. Mr. Amstutz noted that part of the goal of the Transportation Plan, which itself is under development, is to identify some higher level policies for how the Town should examine its transportation system, and that a goal was to ask what the purpose of the transportation system is. By drilling down into specific recommendations, this should help answer that question. Ms. Dein asked if the word "divert" should be substituted for "reduce." Mr. Katofsky noted that he has confidence the Town can attack this in a smart way.

Mr. Pruitt asked if there was a motion to adjourn. Mr. Katofsky moved and Mr. Miettinen seconded. The Committee, by roll call vote, unanimously voted to adjourn the meeting.

The meeting adjourned at 9:30 a.m.

The next meeting will occur on April 24, 2020.

Submitted by Dave Levy.

Clean Energy Supply ☐ Playbook section background research and resources

GENERAL		FEASIBILITY						MEASUREMENT	
Action Number	Action	Example	Source Link	Timeframe	Lead Implementer	Key Partner(s)	Funding and Financing	Calculating Benefits, and Impact	Performance Indicators
1	Increase renewable energy in Arlington Community Choice Aggregation (CCA) program so default level is 100% carbon-free by 2030, and then maintain that outcome permanently. Until that goal is reached, conduct an annual outreach campaign to encourage residents and businesses to opt up to the 100% renewable electricity level in the CCA.	MAPC Aggregation Toolkit; MCAN; Massachusetts; Gloucester; Boston; Arlington, Somerville, Brookline	https://masspowerchoice.com/ https://www.massclimateaction.org/community_aggregation https://communitychoiceboston.org/ https://arlingtoncca.com/opt-up/ https://somerillecce.com/opt-up-to-premium-100-local-green/ https://brooklineoptup.com/	Short Term	City Staff; sustainability volunteers			Equity - enables all residents to access clean energy supply, but also has the potential to disproportionately benefit higher income customers with the economic flexibility to opt-up. This will depend on the prices of participation and where the default is set; Environmental - increased supply of local renewable energy, improved air quality. Reduced carbon emissions from electricity consumption by residents and businesses; Economic - Electricity prices that are more stable and vary less season by season; Electricity that has a higher percentage of renewable electricity than is required by state law; Protection from the predatory practices of some retail electricity suppliers	Number of customers in the Green Municipal Aggregation, number of customers that opt-up, additional renewable energy purchased
2	Investigate the feasibility of developing a low-income community shared solar program.	Resonant Energy Pilot Projects in Boston; Newton Low-Income Community Shared Solar Project	http://www.resonant.energy/	Intermediate Term	City Staff; Low Income Residents; community groups and organizers; solar developer; Electric Utility; community shared solar vendors		SMART program; Net Metering Credits	Economic - reduced monthly electric bill costs for low-income customers; Equity - programmatic focus on serving low-income residents	Number of low-income customers served and average monthly bill savings, number of community shared solar projects/programs implemented, kWh of solar for low-income customers
3	Support state legislation and policies that decarbonize the region's electricity supply. Where possible, promote decarbonization incentives specifically for low to moderate income residents.			Intermediate Term	Town Staff; Select Board	Climate advocacy organizations			

Clean Energy Supply ☐ Playbook section background research and resources

GENERAL				FEASIBILITY				MEASUREMENT	
Action Number	Action	Example	Source Link	Timeframe	Lead Implementer	Key Partner(s)	Funding and Financing	Calculating Benefits, and Impact	Performance Indicators
4	Partner with utilities and others to promote pilot neighborhood-scale district geothermal energy projects to help transition Arlington away from natural gas and toward all-electric buildings.	MAPC Water Based District Energy White Paper; HEET pilot project in Boston; MassCEC Community Microgrid Feasibility Study	https://heetma.org/feasibility-study-rfp/	Long term	Town staff, National Grid			Public Health - improved air quality; Environmental - reduced tree death from lost gas.	Number of customers switching to clean heating and cooling systems
5	Put pressure on regulators and utilities to greatly accelerate the repair of gas leaks.	MAPC Fixing Our Pipes Study; HEET Shared Action Plan	http://fixourpipes.org/about/ ; https://heetma.org/gas-leaks/	Short and Long Term	Town Staff; Select Board	Mothers Out Front			
6	Transition municipal electricity supply to 100% carbon-free by 2030 (note: Town is on fixed price supply contract until December 2023).			Intermediate Term	Town Staff				